



**ENVIRONMENTAL PROTECTION AGENCY**

**[EPA-HQ-OW-2013-0262; FRL-8912-02--OW]**

**Re-Issuance of a General Permit to the National Science Foundation for the Ocean Disposal of Man-Made Ice Piers from its Station at McMurdo Sound in Antarctica**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice; final permit.

**SUMMARY:** Environmental Protection Agency (EPA) is re-issuing a general permit under the Marine Protection, Research, and Sanctuaries Act (MPRSA) authorizing the National Science Foundation (NSF) to dispose of ice piers in ocean waters. The permit conditions are substantively the same as those established in the permit issued on April 22, 2014. Permit re-issuance is necessary because the current permit has expired.

**DATES:** This general permit is effective **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** This final permit is identified as Docket No. EPA-HQ-OW-2013-0262.

The record is closed but available for inspection at <https://www.regulations.gov>. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are closed to the public, with limited exceptions, to reduce the risk of

transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform. For further information on EPA Docket Center services and the current status, please visit us online at <https://www.epa.gov/dockets>.

**FOR FURTHER INFORMATION CONTACT:** Betsy Valente, Physical Scientist, Freshwater and Marine Regulatory Branch, Oceans, Wetlands, and Communities Division (4504T), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460; telephone (202) 564-9895; email address: [valente.betsy@epa.gov](mailto:valente.betsy@epa.gov).

**SUPPLEMENTARY INFORMATION:** EPA has issued three MPRSA permits to NSF for the ocean disposal of man-made ice piers from its station at McMurdo Sound in Antarctica: an emergency permit issued on February 1, 1999; a general permit published in the *Federal Register* on February 14, 2003 (68 FR 7536); and a general permit published in the *Federal Register* on April 22, 2014 (79 FR 22488).

MPRSA section 104(a) provides that permits shall be issued for a period not to exceed seven years, 33 U.S.C. 1414(a). This general permit published in the *Federal Register* on April 22, 2014, has expired, but it remains in effect under the Administrative Procedure Act, 5 U.S.C. 558(c) because NSF filed a timely and sufficient application for renewal prior to expiration. EPA published a notice proposing re-issuance of a general permit on April 28, 2021 (86 FR 22408). Today's action by the EPA finalizes the provisions of the general permit and authorizes NSF to ocean dispose of man-made ice piers from McMurdo Station in Antarctica for a seven-year period. This general permit is re-issued under sections 102(a) and 104(c) of the MPRSA.

NSF is the agency of the United States Government responsible for oversight of the United States Antarctic Program. NSF currently operates three major stations in Antarctica:

McMurdo Station on Ross Island, adjacent to McMurdo Sound; Palmer Station, near the western terminus of the Antarctic Peninsula; and Amundsen-Scott South Pole Station, at the geographic South Pole. McMurdo Station is the largest of the three stations and serves as the primary logistics site for operations at McMurdo and South Pole Stations, with the great majority of supplies arriving here via vessel. To unload supplies, ships dock at a man-made ice pier.

The service life of past man-made ice piers has ranged from one to ten years. NSF constructed the current ice pier in 2021. Prior to the current pier, the three most recently constructed ice piers averaged two years of use before disposal in ocean waters. The permit allows NSF to ocean dispose of ice piers at the end of their service life, including the pier currently in use and any additional ice piers constructed at McMurdo Station. Eight is the maximum number of man-made ice piers estimated for ocean disposal during the seven-year effective period of the permit; however, NSF anticipates that four or fewer piers will need to be ocean disposed during this period.

When an ice pier is at the end of its effective life, all structures, operational equipment and materials, debris, and any objects of anthropogenic origin are removed from the surface of the pier to the safest extent possible. The pier then is cast loose from its moorings at the base and is either allowed to drift with the wind and current or towed to McMurdo Sound for ocean disposal, where it would float freely within the ice pack, mix with the annual sea ice, and eventually disintegrate naturally with any remaining internal pipes or cables eventually dropping out and falling to the seafloor. This general permit is necessary because ice piers must be released from shore and transported to sea for disposal at the end of their effective

life. While it is preferable to tow these ice piers out to sea for disposal before releasing them to ensure they do not lodge on shore near McMurdo Station, which this general permit authorizes, this is not often possible due to the lack of availability of an appropriate towing vessel. Thus, many past ice piers have been merely released directly from shore and been allowed to float freely with the wind and current. This general permit is intended to protect the marine environment by setting forth specific permit terms and conditions, including operating conditions that occur over the life of the pier and required clean-up actions prior to disposal, with which NSF would need to comply in advance of any ice pier disposal. The majority of permit terms involve activities that occur in advance of any anticipated disposal of the ice pier, regardless of the method of release to ocean waters.

#### **A. Background on McMurdo Station Ice Pier**

NSF constructs ice piers during the austral winter, beginning when the frozen pack ice in McMurdo Sound reaches a thickness of approximately three feet. First, a berm of snow is created on the ice pack to define the perimeter of what will become the ice pier. Heavy-duty pumps are used to flood the bermed area with approximately four inches of seawater. The water freezes in about 24 to 48 hours. The process is repeated, each time creating another four-inch layer until the ice reaches a total thickness of approximately five to seven feet. At this stage, holes are drilled in the ice and sections of eight-inch diameter steel pipe are inserted vertically into the holes. One-inch steel cable is woven around the steel pipes; this cable is used to keep the pier “strung together” should cracks occur, rather than to provide structural strength. The entire aforementioned process is repeated; approximately five to seven feet of ice is added on the first layer, a second layer of cable is added, and approximately five to seven feet of ice is added on top of that. The final target thickness of the pier is a maximum of 20 feet. Throughout construction, at intervals dictated by environmental conditions, cuts are made

around the edge of the pier to separate it from the surrounding ice. This can be done using trenching equipment or a drill.

Several steel pipe sections are frozen around the proximal edge of the pier to attach the pier to the mainland via cables and to serve as bollards to moor vessels. Following completion of the ice portion of the pier, a six- to eight-inch layer of one-inch locally-sourced gravel is applied to the surface of the pier to insulate the structure during the warmest part of the year and to provide a non-slip working surface. A tracking device is also placed on the ice pier during this process. At the end of each austral summer season, the gravel is removed and stored for use the following season.

A typical ice pier measures 550 feet (168 meters) long, 250 feet (76 meters) wide, and 20 feet (6 meters) in thickness. Ice piers are generally constructed using 1) 13,000 feet (3,962 meters) of one-inch steel cable; 2) 150 feet (46 meters) of eight-inch steel pipe; 3) 150 feet of 12-inch steel pipe; and 4) 4,000 cubic yards of one-inch or smaller gravel.

On occasion, cracks develop in the ice pier and must be repaired to ensure that the pier is safe for use. One repair method uses additional steel pipe and cable to “suture” the surface of the pier. A second method uses passive thermosyphons (a device that transfers heat via natural convection in a fluid, known programmatically as a “freeze cell”) to repair cracks in the ice pier. In 1998, thermosyphons filled with food grade glycol were used on an experimental basis to stimulate ice growth to repair cracks in the ice pier. The cells stimulated adequate ice growth and were removed with no impact to the environment. Because the technique has proven to be successful, thermosyphons may be used when cracks develop that require additional ice growth to effect repair. Thermosyphons are constructed of approximately 40-foot lengths of 3.5-inch diameter steel pipe filled with glycol and are placed into holes drilled

into an ice pier. Approximately half of the pipe's length is embedded in the ice while the remaining half is exposed above the surface. Thermosyphons are fully removed once the repairs are completed.

Spills of materials such as food grade glycol, hydraulic fluid, oil, and diesel fuel may occur on an ice pier. All spills are thoroughly reported, documented and cleaned up to the extent practicable; however, some spilled material may penetrate the ice and full recovery would damage the pier to the point that it may become unusable. Locations of spills on the ice pier are marked and mapped. Before a pier is transported and disposed at sea, NSF recovers any residual spilled material to the extent possible. Since 2011 there have been 16 small spills, eight of which related to the use of thermosyphons. NSF has since reviewed and revised its procedures for the installation and removal of thermosyphons to minimize the possibility of further spills associated with this activity.

The other eight spills on an ice pier were primarily the result of mechanical equipment failures due to the extreme environmental conditions (e.g., failed hydraulic line). Spill amounts since 2011 ranged from 0.25 to 9 gallons.

The effective lifespan of previous man-made ice piers has ranged from one to ten years and was highly dependent on regional environmental conditions in the years following construction. Wave action or contact with vessels may cause erosion of the seaward face of an ice pier. Local meltwater drainage may erode parts of the mainland side of an ice pier. Periods of unseasonably warm weather can also decrease the lifespan of an ice pier. Factors such as stress cracking and erosion can cause an ice pier to deteriorate and become unsafe for use. In the period between the late 1970s through 2009, ocean current and wave action reaching McMurdo Sound were lower compared to current conditions due to more stable ice cover

caused by the grounding of the world's largest iceberg in the early 2000s. Since that time, conditions, temperatures, and storminess have been more variable.

When an ice pier has deteriorated to the point that it is not capable of being used the following year, it is prepared for disposal. Prior to the disposal of an ice pier, all structures, operational equipment and materials, debris, and any objects of anthropogenic origin are removed from the surface of the pier to the safest extent possible. Additionally, all steel pipes are cut at the ice surface and removed from the pier leaving only the portion embedded in the ice. Removal of steel pipes embedded in the ice is not technically feasible and likely impossible. The gravel cover is removed to the maximum extent possible and transported to the mainland for subsequent use or storage. Like steel pipes, removal of gravel embedded in the ice is not technically feasible. Due to the extreme Antarctic environment, and at times unpredictable weather, the safety of personnel will always be considered a higher priority than achieving maximum material removal.

Before a new ice pier can be constructed during the austral winter (March through September), the existing ice pier in the same location must first be ocean disposed. Ocean disposal of an ice pier typically occurs following the annual delivery of fuel and supplies to McMurdo Station at the end of the austral summer (approximately late February-March) when there are 18 to 24 hours of daylight per day.

If possible, an ice pier may be towed from its location by vessel (e.g., by a United States Coast Guard icebreaker) for ocean disposal in McMurdo Sound. The chartered icebreaker is typically at McMurdo Station for very limited periods (i.e., no more than one month), and it has been rare for an icebreaker to be at the station when an ice pier needs to be transported for ocean disposal. The last time an ice pier was towed from McMurdo Station was 1990. An ice pier is

more likely to be freely released from its site of attachment at the shore in Winter Quarters Bay when winds and tide conditions are favorable to move the pier north out of McMurdo Sound.

The pier is then carried north by winds and tide to the Ross Sea gyre and may enter the Antarctic Circumpolar Current which flows from west to east and carries the ice pier away from the seasonal sea ice and along the coast of Antarctica. This path has been well documented from the tracking device reporting, as initially required under the 2003 general permit and since. The tracking and reporting requirement is retained in this permit.

Occasionally, a large storm has broken an ice pier loose and caused the unexpected release of a pier; in such cases, the piers either moved along the same current paths or became frozen in McMurdo Sound. Regardless of method of release, the disposal site is McMurdo Sound, where the pier then floats freely within the ice pack, mix with the annual sea ice, and eventually disintegrate due to wind or waves.

The materials dumped under this general permit (other than ice, which melts naturally) include the remaining materials used in the construction of the ice pier that cannot be removed prior to disposal, and generally consist of: (1) 13,000 feet of one-inch steel cable; (2) 150 feet of eight-inch steel pipe; and (3) 150 feet of 12-inch steel pipe, all of which remain embedded in the ice because removal is technically infeasible. Although the general permit generally requires NSF to remove above-surface materials on the piers and to place a tracking device on the pier prior to release, this is not always possible due to safety concerns when conditions deteriorate rapidly; the permit recognizes the need for disposal in emergency circumstances. Over the past decade, the placement of materials on the ice pier has been significantly reduced, decreasing the potential for materials to enter the ocean if an unplanned release of the pier occurs. The tracking devices are now secured on the pier and turned on before the arrival of the ice breaker in case there is an event which causes the pier to be inadvertently released. When offload operations are complete and the pier is securely frozen in place for the winter, the tracking



device is turned off and removed from the pier for use in the following year.

## **B. Statutory and Regulatory Background**

### *1. Marine Protection, Research, and Sanctuaries (MPRSA)*

Section 102(a) of the MPRSA, 33 U.S.C. 1412(a) requires that agencies or instrumentalities of the United States obtain a permit to transport any material from any location for the purpose of dumping into ocean waters. NSF is an agency or instrumentality of the United States. MPRSA section 104(c), 33 U.S.C. 1414(c), and EPA regulations at 40 CFR 220.3(a) authorize the issuance of a general permit under the MPRSA for the dumping of materials which have a minimal adverse environmental impact and are generally disposed of in small quantities. The transportation of ice piers from McMurdo Station for disposal at sea constitutes transportation of material for the purpose of dumping in ocean waters, and thus is subject to the MPRSA. EPA has determined that ocean disposal of the material associated with the ice piers is likely to cause only a minimal adverse environmental effect and represents comparatively small quantities of unrecoverable non-ice materials. In the United States, the MPRSA implements the requirements of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter of 1972, known as the London Convention.

### *2. Obligations under International Law*

The Antarctic Science, Tourism, and Conservation Act of 1996 amended the Antarctic Conservation Act of 1978. This law is designed to implement the provisions of the Protocol on Environmental Protection to the Antarctic Treaty ("the Protocol"). The United States

Senate ratified the Protocol on April 17, 1997, and it entered into force on January 18, 1998.

The Protocol builds on the Antarctic Treaty to extend its effectiveness as a mechanism for ensuring protection of the Antarctic environment. The Protocol designates Antarctica as a natural reserve, devoted to peace and science, and sets forth basic principles and detailed, mandatory rules applicable to human activities in Antarctica. The Protocol prohibits all activities relating to mineral resources in Antarctica, except for scientific research, and commits signatories to the Protocol (known as Parties) to environmental impact assessment procedures for proposed activities, both governmental and private. Among other things, the Protocol also requires Parties to protect Antarctic flora and fauna and imposes strict limitations on disposal of wastes in Antarctica, and discharges of pollutants into Antarctic waters.

Several sets of regulations implement the legislation that, in turn, implements the Protocol, including: (a) NSF regulations regarding environmental impact assessment of proposed NSF actions in Antarctica (45 CFR part 641); (b) NSF waste regulations for Antarctica (45 CFR part 671); and (c) EPA regulations regarding environmental impact assessment of non-governmental activities in Antarctica (40 CFR part 8).

In this regard, EPA notes that NSF completed a United States Antarctic Program (USAP) Environmental Impact Statement (June 1980), a USAP Final Supplemental Environmental Impact Statement (October 1991), and a Comprehensive Environmental Evaluation for Continuation and Modernization of McMurdo Station Area Activities (August 2019). Additional environmental impact assessments included an Initial Environmental Evaluation (May 1992) and issued two Records of Environmental Review: Installation of Freeze Cells in Ice Piers (1998) and Use of Freeze Cells in Ice piers to Repair Cracks (2000). All these documents address various aspects of the construction, operation, and disposal of ice piers at

McMurdo Station in Antarctica. The documents are available for review through the EPA docket for this action and at the Office of Polar Programs of NSF, 2515 Eisenhower Avenue, Alexandria, VA 22314. (For further information from NSF, please contact Polly Penhale, at 703-292-7420.) None of these documents identified any potential environmental impacts from the disposal of ice piers, other than the minor navigational hazard equivalent to that posed by an ice floe or a small iceberg. The Agency considered the analyses contained in these six documents in re-issuance of the general permit for NSF.

### *C. Potential Effects of Ice Pier Disposal*

EPA's decision to authorize NSF's ocean disposal of ice piers under this general permit is based on findings regarding three areas of the ocean disposal of ice piers in ocean waters off the Antarctic: (1) the fate of the materials disposed in the ocean, (2) the potential effects of ice pier disposal on organisms in the polar marine environment, large whales, seals, bird species, and (3) environmental concerns associated with any operational discharges, leaks, or spills that may have contaminated the surface of the pier.

The materials contained in the ice pier that cannot be removed (approximately 13,000 feet of one-inch steel cable, 150 feet of eight-inch steel pipe, and 150 feet of 12-inch steel pipe) will, eventually, sink to the sea floor after the surrounding ice has disintegrated. While the ice is slowly disintegrating into the Antarctic Sea or the Southern Ocean, it is possible that loops of cable from partially disintegrated layers of ice may hang temporarily from the floating pier. However, considering the normal behavior and habits of whales, seals, and sea birds, the disposal of ice piers under this permit are not anticipated to effect any of these species; any effects on species are extremely unlikely to occur.

In 1993 and again in 1994, NSF sampled the ice on the surface of the pier to assess the potential for contamination from discharges of gasoline and antifreeze. Contamination was detected in only one location directly under two 55-gallon fuel drums. In response, NSF issued a directive that all fuel drums shall be underlain with secondary containment methods. Also, as one of the conditions of the 2003 permit, NSF developed and now implements a spill prevention, control, and countermeasure (SPCC) plan for its station at McMurdo Sound under NSF jurisdiction in Antarctica to reduce the potential for adverse effects associated with any such spills. That plan, updated in 2017, is titled: Spill Prevention, Control, and Countermeasure (SPCC) Plan, McMurdo Station, McMurdo Sound, Antarctica. The SPCC plan includes a section addressing fuel storage and transfer systems for the ice pier at McMurdo Station. With the implementation of new protective measures in the updated 2017 plan, such as longer length hoses for unloading petroleum products from the annual supply tanker and new precautions taken in the handling and return to facilities outside Antarctica of used or contaminated chemicals, solvents, and hazardous materials, the risks of any spill or any discharge of these materials is now lower than under the 2012 SPCC plan. There is considerable vehicular traffic on the ice pier during the austral summer season, and the possibility of engine block leaks or discharges from these vehicles cannot be totally avoided. However, NSF has provided EPA reasonable assurance that every effort to mitigate the risk of leakages or discharges is being taken, including limits on the time that vehicles are parked on the pier and that no vehicles are ever parked on the pier overnight.

#### *D. Discussion*

Considering the information presented in the previous section, EPA finds that the potential effects of this disposal are minimal and in accordance with the statutory standards applicable to permit issuance under the MPRSA.

This general permit re-issued to NSF and its agents for the ocean disposal of man-made ice piers from the NSF station at McMurdo Sound, Antarctica, is subject to nine specific conditions, outlined below, applicable during the use and disposal of ice piers.

First, the general permit requires that NSF continue to maintain and implement an SPCC plan, consistent with the requirements of 40 CFR 112.3, for man-made ice piers. The SPCC plan (and any update) shall address procedures for loading and unloading the following materials, and shall include methods to minimize the accidental release or discharge of any of the following materials to an ice pier:

- (1) Petroleum products unloaded from supply tankers to the storage tanks at McMurdo Station;
- (2) Drummed chemicals, petroleum products, and materials unloaded from cargo freighters to supply depots at McMurdo Station; and
- (3) Materials loaded to freighters destined to be returned to facilities outside Antarctica.
- (4) Material spilled as a result of thermosyphon use or related activities.

Second, the general permit requires that if a spill or discharge occurs on an ice pier, it must be completely cleaned so that no visible evidence remains, unless 100% removal would result in greater environmental risk or put the safety of personnel at risk. All spills or discharges on an ice pier should be cleaned soon as possible.

Third, an official record of the following information shall be kept by NSF:

- (1) The date and time of all spills or discharges, the location of the spill or discharge, a description of the material that was spilled or discharged, the approximate volume of the spill or discharge, clean-up procedures employed, the amount of gravel and/or ice removed,

photos of the spill sites before and after clean-up, if lighting allows, and the results of clean-up procedures(e.g., estimate of percentage of spill removed);

(2) The length of the steel cables and steel pipe used in construction of the ice pier;

(3) The length of the steel cables and steel pipe remaining on the ice pier at the time of its release;

(4) Any other materials remaining on the ice pier at the time of its release; and

(5) The date of detachment of the ice pier from McMurdo Station, as well as the geographic coordinates (latitude and longitude) of the point of its release if the release occurs at a location other than directly from shore at McMurdo Station.

Fourth, NSF shall place a tracking device on the pier prior to ship operations each season.

The fifth condition refers to incidents where an ice pier may be released from shore if NSF finds that rapid deterioration of a pier is becoming a threat to human health and safety, or because anticipated weather conditions (e.g., strong storms) are likely to break an ice pier apart or break an ice pier loose from its moorings. Should this unanticipated release be needed, an attempt shall be made to meet all of the requirements described in the sixth condition below that can be safely completed given the circumstances.

The sixth condition describes actions that shall be taken by NSF prior to the towing of an ice pier to sea for ocean disposal or the planned release from shore due to the absence of vessels capable of towing. Actions to be taken by NSF include the following:

(1) Other than the matter embedded in the ice pier (i.e., the ends of pipes frozen in the pier, and the strengthening cables), all other objects (including the non-embedded portions of materials used for maintaining a connection between the pier and the mainland and any removable equipment, debris, or objects of anthropogenic origin), shall be removed from the pier

and shall not be disposed in the ocean.

(2) The gravel non-slip surface of the pier shall be removed to the maximum extent practicable.

(3) Documentation including photographs, if lighting allows, of ice pier clean-up and of the ice pier just prior to, during and after release shall be developed.

(4) NSF shall use the tracking device required in condition 4 above to track the ice piers disposed of under this permit for as long as the device remains active. NSF shall include the tracking data from this effort in the annual report that NSF is required to submit to EPA under condition 7 below.

Seventh, NSF shall submit a report by June 30 of every year to the Director of the Oceans, Wetlands, and Communities Division in EPA's Office of Water. The report must identify:

(1) any spills, discharges, or clean-up procedures on the ice pier at McMurdo Station, including but not limited to:

- a. Amount of surface gravel removed due to spills,
- b. Description of removal of potentially contaminated ice layers,
- c. Images, if lighting allows, documenting the spill sites before and after clean-up, and
- d. Copies of spill and clean-up records and other records.

(2) Detailed reports of all ice pier ocean disposals from McMurdo Station for the year, including:

- a. Detailed descriptions and photographs of release, and if towed, the name and activity of the vessel associated with the disposal,
- b. The time, date, and geographic coordinates (latitude and longitude) of the point of release (if released from a location other than directly from shore at McMurdo Station) in McMurdo Sound or the Ross Sea and the tracking data as the ice pier moves on its

trajectory in the Southern Ocean,

c. Other reports and materials (e.g., documents, photos) generated under permit,

d. Details of clean-up procedures,

e. Amounts of all materials remaining on the piers at the time of release, and

f. Any tracking efforts of ice piers released from McMurdo Station under this general permit for the year preceding the date of the annual report.

(3) A current copy of the SPCC, if revised or updated since previous submission.

The eighth and ninth conditions define the term “ice pier” and explain that the permit shall be valid for seven years, as per the MPRSA, respectively.

Any contaminants remaining on the surface of the piers after release are expected to be minimal and insignificant. The area over which the disintegration of the piers occurs is immense. Thus, the dilution of contaminants in ocean waters should be adequate such that the potential for damage to the environment from ocean disposal of any McMurdo Station ice piers is minimal. In addition, the possibility of entanglement of large organisms in suspended loops of cable from the disintegrating ice piers has been determined by EPA to be very minimal. (Further discussion of this issue can be found in “C. Potential Effects of Ice Pier Disposal,” above.)

Finally, the re-issuance of this permit to NSF does not in any way relieve NSF of meeting the United States' obligations under the Antarctic Protocol, the Antarctic Conservation Act, or the implementing regulations.

## **E. Responses to Comments Received**



EPA received one comment during the public comment period. The comment raised objections to the steel cable being allowed to remain in the ice piers disposed at sea and suggested that the steel cable should be reused or shipped back from Antarctica rather than disposed at sea.

EPA disagrees that these concerns warrant rejecting the permit re-issuance application. The steel cable is an essential structural component of ice piers needed to hold the pier together in the event of cracking, to maintain the stability of the pier, and for safety, and more importantly, the cable contained within the ice piers cannot be safely removed at the end of the useful life of the ice pier. This general permit is as protective of the environment as possible as it requires the removal of all materials from the ice pier prior to disposal except those which cannot be removed because they are embedded (contained within) in the ice pier itself.

## **F. Statutory and Executive Order Reviews**

### *Paperwork Reduction Act*

The Paperwork Reduction Act, 44 U.S.C. 3501 et seq., is intended to minimize the reporting and record-keeping burden on the regulated community, as well as to minimize the cost of Federal information collection and dissemination. In general, the Act requires that information requests and record-keeping requirements affecting ten or more non-Federal respondents be approved by the Office of Management and Budget. Because this general permit affects only Federal agency record-keeping and reporting requirements, it is not subject to the requirements of the Paperwork Reduction Act.

Brian Frazer, Director,  
Oceans, Wetlands, and Communities Division.

For the reasons stated above, EPA re-issues the general permit for NSF as follows:

### **Disposal of Ice Piers from McMurdo Station, Antarctica**

The United States National Science Foundation (NSF) and its agents are hereby granted a general permit under sections 102(a) and 104(c) of the Marine Protection, Research, and Sanctuaries Act, 33 U.S.C. 1412(a) and 1414(c), to transport ice piers from the McMurdo Sound, Antarctica, research station for the purpose of ocean dumping, subject to the following conditions:

(A) The NSF shall implement a spill prevention, control, and countermeasure (SPCC) plan, consistent with the requirements of 40 CFR 112.3, for the McMurdo Station ice pier. The SPCC plan shall address procedures for loading and unloading the following materials, and shall include methods to minimize the accidental release or discharge of any of the following materials to the ice pier:

- (1) Petroleum products unloaded from supply tankers to the storage tanks at McMurdo Station;
- (2) Drummed chemicals, petroleum products, and materials unloaded from cargo freighters to supply depots at McMurdo Station;
- (3) Materials loaded to freighters destined to be returned to facilities outside Antarctica; and
- (4) Material spilled as a result of thermosyphon use or related activities.

(B) If a spill or discharge occurs on an ice pier, it will be completely cleaned up, such that no visible evidence remains, unless 100% removal would result in greater environmental risk or put the safety of personnel at risk. All spills or discharges on an ice pier should be cleaned up

soon as possible.

(C) An up-to-date record of the following information shall be kept by NSF:

(1) The date and time of all spills or discharges, the location of the spill or discharge, a description of the material that was spilled or discharged, the approximate volume of the spill or discharge, cleanup procedures employed, the amount of gravel and/or ice removed, photos of the spill sites before and after clean-up, if lighting allows, and the results of the clean-up procedures (e.g., estimate of percentage of spill removed);

(2) The length of the steel cables and steel pipe used in the construction of the ice pier;

(3) The length of the steel cables and steel pipe remaining on the ice pier at the time of its release;

(4) Any other materials remaining on the ice pier at the time of its release; and

(5) The date of detachment of the ice pier from McMurdo Station and the geographic coordinates (latitude and longitude) of the point of its release if the release occurs at a location other than directly from shore at McMurdo Station.

(D) NSF shall place a tracking device, as specified in paragraph (F)(3), on the pier prior to ship operations each season.

(E) An ice pier may be released from shore if NSF finds that rapid deterioration of a pier is becoming a threat to human health and safety or because anticipated weather conditions (e.g., strong storms) are likely to break an ice pier apart or break an ice pier loose from its moorings. Should this unanticipated release be needed, an attempt shall be made to meet all of the requirements described in paragraph F below that can be safely completed given the circumstances.

(F) Prior to the towing of an ice pier to sea for ocean disposal or the planned release from shore due to the absence of vessels capable of towing, the following actions shall be taken by NSF:

(1) Other than the matter embedded in the ice pier (i.e., the ends of pipe frozen in the pier, and the strengthening cables), all other objects (including the non-embedded portions of materials used for maintaining a connection between the pier and the mainland and any removable equipment, debris, or objects of anthropogenic origin), shall be removed from the pier and shall not be disposed in the ocean.

(2) The gravel non-slip surface of the pier shall be removed to the maximum extent practicable.

(3) Documentation including photographs, if lighting allows, of ice pier clean-up and of the ice pier just prior to, during and after release shall be developed.

(4) NSF shall implement a methodology using the tracking device placed on the ice pier under Section D above to track the ice piers disposed of under this permit for as long as the device remains active. NSF shall include the tracking data from this effort as well as any visual observations taken regarding the trajectory of the ice pier in the annual report that NSF is required to submit to EPA under paragraph G below.

(G) NSF shall submit a report by June 30 of every year to the Director of the Oceans, Wetlands and Communities Division, in EPA's Office of Water, on

(1) any spills, discharges, or clean-up procedures on the ice pier at McMurdo Station, including but not limited to:

- a. Amount of surface gravel removed due to spills,
- b. Description of removal of potentially contaminated ice layers,
- c. Images, if lighting allows, documenting the spill sites before and after clean-up, and
- d. Copies of spill and cleanup records and other records as developed under Section C above.

(2) Detailed reports of all ice pier ocean disposals from McMurdo Station for the year, including:

a. Detailed descriptions and photographs of release of the ice pier from shore including documentation about the circumstances that led to release of the pier from shore and how the pier was released, and if towed, the name and activity of the vessel associate with the disposal,

b. The time, date, and geographic coordinates (latitude and longitude) of the point of release (if released from a location other than directly from shore at McMurdo Station) in McMurdo Sound or the Ross Sea and the tracking data as the ice pier moves on its trajectory in the Southern Ocean,

c. All reports/materials (e.g., documents, photos) generated under paragraphs C, D, E, and F above,

d. Details of clean-up procedures,

e. Amounts of all materials remaining on the piers at the time of release, and

f. Any tracking efforts of ice piers released from McMurdo Station under this general permit for the year preceding the date of the annual report.

(3) A current copy of the SPCC, if revised or updated since previous submission.

(H) For the purpose of this permit, the term “ice pier(s)” means those manmade ice structures containing embedded steel cable, and pipe, and any remaining gravel frozen into the surface of the pier, that are constructed at McMurdo Station, Antarctica, for the purpose of off-loading the annual provision of material and supplies for McMurdo and South Pole Stations and for loading the previous year’s accumulation of wastes, which are returned to the United States.

(I) This permit shall be valid for a period of seven years beginning 30 days after the date of publication in the *Federal Register*.